Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

Please cancel claims 1-23 without prejudice or disclaimer and add new claims 24-46 in their place.

Claims 1 -23 (cancelled).

24. (New) A method for sensing biometric information in a digit, comprising:

piezo electrically sensing acoustic characteristics of the digit via an array of discrete piezo ceramic elements; and

facilitating (i) acoustic attenuation and (ii) electrical isolation between the discrete piezo ceramic elements by distributing a filler therebetween.

25. (New) The method of claim 24, wherein the distributing further suppresses shear waves between the discrete piezo ceramic elements and mechanically supports the discrete piezo ceramic elements.

26. (New) The method of claim 24, comprising including micro-spheres within the filler.

27. (New) The method of claim 26, comprising providing micro-spheres that include vinyl.

28. (New) The method of claim 24, comprising providing a plurality of discrete columnar piezo ceramic elements within the discrete piezo ceramic elements, each columnar element having first and second ends.

29. (New) The method of claim 28, further comprising electrically coupling the first and second ends to first and second grids of conductors, respectively.

30. (New) The method of claim 29, further comprising coupling the first grid of conductors to a protective layer that can receive a ridge pattern of the digit positioned proximate to the array;

wherein air in valleys between ridges of the ridge pattern acts as an acoustic barrier.

31. (New) The method of claim 30, further comprising coupling the second grid of conductors to a backing layer.

32. (New) The method of claim 30, further comprising providing an air backing to the second grid of conductors, the air backing being acoustically mismatched with the discrete columnar piezo ceramic elements.

33. (New) The method of claim 28, further comprising acoustically coupling a protective layer to the first ends of the elements, wherein the protective layer receives a ridge pattern of the digit positioned proximate to the array;

wherein air in valleys between ridges of the ridge pattern acts as an acoustic barrier.

34. (New) The method of claim 28, further comprising acoustically mismatching a backing layer with the discrete columnar piezo ceramic elements.

35. (New) The method of claim 34, further comprising providing air within the backing layer.

36. (New) The method of claim 11, further comprising providing foam within the backing layer.

37. (New) The method of claim 1, further comprising providing discrete piezo ceramic elements that include lead zirconate titanate.

38. (New) A method for performing biometric sensing, comprising:

piezo electrically sensing via a ceramic sensor; and

performing processing via a processor, coupled the sensor, configured to receive an input from the sensor and produce an output;

wherein the sensor comprises an array of piezoelectric ceramic elements and includes a sonic barrier between each of the elements.

39. (New) The method of claim 38, comprising providing air as the sonic barrier.

40. (New) The method of claim 38, comprising providing an epoxy containing micro-spheres as the sonic barrier.

41. (New) The method of claim 40, further comprising providing micro-spheres that include vinyl.

42. (New) The method of claim 38, further comprising:

coupling a medium that conducts sonic energy to the sensor such that a low sonic energy barrier is formed between the medium and the sensor.

43. (New) The method of claim 42, further comprising providing an impedance within the medium that facilitates conducting sonic energy into tissue.

44. (New) The method of claim 23, further comprising providing a polymer as the medium.

45. (New) The method of claim 23, further comprising providing urethane as the medium.

46. (New) A method for sensing biometric information in a digit, comprising:

piezo electrically sensing via an array of discrete piezo ceramic elements responsive to acoustic characteristics of parts of the digit; and

distributing a material between the discrete piezo ceramic elements to provide acoustic attenuation and electric isolation therebetween.